

**D-31 Series, Rated up to 100 Amps, 115/200 VAC, 400 Hz**

**Product Facts**

- 3PDT, Center off
- Hermetically sealed
- Auxiliary contacts available
- Meets many requirements of MIL-PRF-6106



**Performance Data**

**Electrical Characteristics**

**Contact Arrangement** — 3PDT, Center Off

**Rated Operating Voltage** — 115/200 VAC, 400 Hz, 3 phase

**Resistive Rating** — 100 Amps

**General Characteristics**

**Temperature Range** — -55°C to +71°C

**Operating Cycles (Life) at Rated Resistive Load, Min.** — 50,000 cycles

**Operating Cycles (Life) Mechanical, Min.** — 100,000 cycles

**Dielectric Strength** — All Circuits to Ground — 1,500 Vrms  
Circuit to Circuit — 1,500 Vrms  
Coil to Ground and Aux. Contacts — 1,000 Vrms

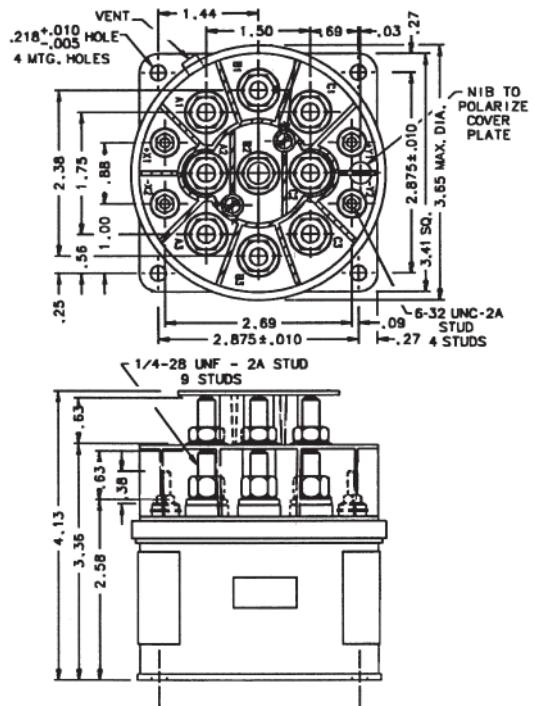
**Altitude** — 50,000 ft  
**Weight, Max.** — 2.31 lbs

**Coil Characteristics**

**Duty Cycle** — Continuous  
**Operating Voltage, Nom.** — 28 Vdc  
**Pickup Voltage @ 71°C, Max.** — 18 Vdc

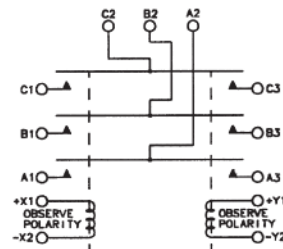
**Dropout Voltage, Max.** — 1.5 to 7 Vdc

**Coil Resistance ±20% @ 25°C** — 160 Ohms



Mounting Style A

**Circuit Configurations** (Consult factory for other available circuit configurations)



Circuit Configuration 1

For factory-direct application assistance, phone 419-521-9500 or fax 419-526-2749.

HARTMAN Part Number	Construction Type	Mounting Style	Coil Type	Circuit Config.	TE Part Number
D-31C	Gasket/Vented	A	Continuous	1	1616049-1

## D-31 Series, Rated up to 100 Amps, 28 Vdc

### Product Facts

- SPDT, Center Off, Double Break
- Gasket Sealed, Vented
- Meets many requirements of MIL-PRF-6106



### Performance Data

#### Electrical Characteristics

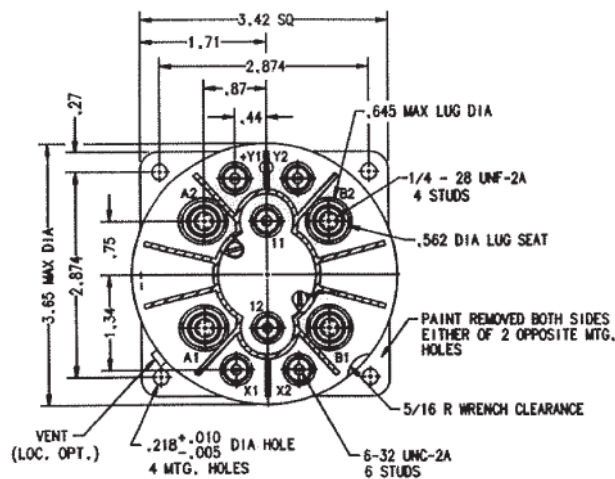
- Main Contacts —**  
**Main Contact Configuration —** SPDT, Center Off, Double Break  
**Voltage, Nom. —** 28 Vdc  
**Resistive Rating —** 100 Amps  
**Inductive Rating —** 100 Amps  
**Motor Rating —** 80 Amps  
**Overload Rating —** 800 Amps  
**Rupture Rating —** 1,000 Amps  
**Auxiliary Contacts —**  
**Aux. Contact Configuration —** SPST, NO  
**Voltage, Nom. —** 115 VAC, 400 Hz or 28 Vdc  
**Resistive Rating —** 3 Amp  
**Inductive Rating —** 3 Amp  
**Lamp Rating —** 1 Amp

#### General Characteristics

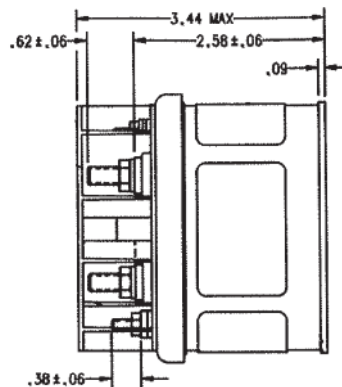
- Temperature Range —** -55°C to +71°C  
**Operating Cycles (Life) at Rated Resistive Load, Min. —** 50,000 cycles  
**Operating Cycles (Life) Mechanical, Min. —** 100,000 cycles  
**Altitude —** 50,000 ft.  
**Weight, Max. —** 1 lb 15 oz

#### Coil Characteristics

- Duty Cycle —** Continuous  
**Coil Data, X Coil —**  
**Operating Voltage, Nominal —** 115 VAC, 400 Hz  
**Pickup Voltage @ 25°C, Max., Initial —** 75 VAC, 400 Hz  
**Dropout Voltage @ 25°C —** 12 V to 38 V  
**Coil Resistance ±20% @ 25°C —** 655 Ohms  
**Coil Current @ 25°C —** .050 Amp DC AV @ 115 VAC, 400 Hz  
**Coil Data, Y Coil —**  
**Operating Voltage, Nominal —** 28 Vdc  
**Pickup Voltage @ 25°C, Max., Initial —** 15 VDC  
**Dropout Voltage @ 25°C —** 2.0 V to 6.5 V  
**Coil Resistance ±20% @ 25°C —** 163 Ohms  
**Coil Current @ 25°C —** .215 Amp Max. @ 28 Vdc

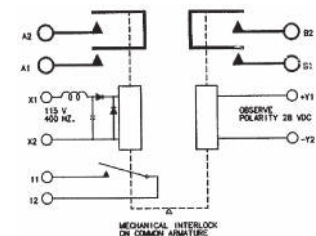


Mounting Style A



### Circuit Configurations

(Consult factory for other available circuit configurations)



Circuit Configuration 1

For factory-direct application assistance, phone 419-521-9500 or fax 419-526-2749.

HARTMAN Part Number	Construction Type	Mounting Style	Coil Type	Circuit Config.	TE Part Number
D-31BAA	Gasket/Vented	A	Continuous	1	1616097-1